

Al for Environmental Sustainability

Virtual meeting 20 10 2021

"Digital with Purpose" seeks to understand the impact Digital technologies have on the SDGs; and catalyse a greater contribution

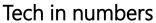








SDGs in numbers



Impact assessment

Estimates to 2030 for:





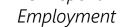
12.5 Reduce waste generation

3. Commit to responsible practices





GVA R&D spend





169 targets across

17 SDGs





E-waste

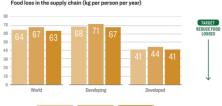
GHG emissions







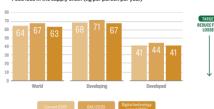
Cluster > target > use case > function





Compared to SDG impact

500+ use cases

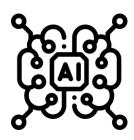


21 targets, plus associated emissions abated for 8 of these targets

67 target clusters, 103 targets considered high impact

Technology & AI: Catalysts for Sustainable Development

Potentials of AI



Al is one of the seven digital technologies that will have a critical influence on the world.

Analysis of the SDG targets and their indicators shows that the expected deployment of existing digital technologies will, on average, help accelerate progress by 22% and mitigate downward trends by 23%.





Technology & AI: Catalysts for Sustainable Development

The Framework

We have developed a mechanism for scoring companies to encourage corporate commitment to the amplification and acceleration of SDG impact through digital technology. The Digital with Purpose framework comprises of three main component parts. Participants will receive an overall Digital with Purpose performance score, and access to like-minded organisations for opportunities to collaborate to overcome shared barriers and drive collective progress against the SDGs.



































Purpose

Metrics covering a company's commitment to becoming a purpose-led business; connecting its core business model to a desired impact on the SDGs, working to maximise its positive contribution and minimise its negative externalities.

Digitally Enabled Solutions

Metrics framed by the SDGs, reflecting how a company contributes innovative digital solutions through its products, services, and core business practices, to improve the sustainability of our society and our planet.

Responsible Business

Metrics covering: Climate Change; Digital Trust and Responsibility; Circular Economy; Digital Inclusion; and Supply Chain. The metrics reflect how the business acts in a responsible manner concerning: its own operations; its interactions with its suppliers; and the design, delivery, and end of life management of its products and services.

To **maximise** the potential of digital technologies and to **diminish** the downsides, there needs to be a **common purpose** both within the ICT sector and more widely throughout partner sectors.





Standardisation and accountability

are key to ensure maximum impact and deliver on ambitious promises.

Our framework of measures monitors performance in delivering digital solutions to societal and environmental challenges and minimising the negative impacts arising from the deployment of digital products and services.

Digital Technology Providers

Component manufacture & design

branding and design

Networks and data centres (cloud)

Software and specific application providers

Device manufacture,

Digital Technology Users

Organisations aside from the technology sector that make extensive use of digital solutions.

Large, often multinational
SME

- So far the framework has been designed to be used by large Digital Technology Providers.
- Work on its application to SMEs is underway and a meeting of DwP SMEs will be convened in September.
- Metrics for Digital Technology Users to be started later in the year.

Technology & AI: Catalysts for Sustainable Development

The role of public-private collaborations



Collaborating with public institutions and governments is crucial to allow for educated and impactful policies able to implement innovative solutions.







Key Messages

Urgent intervention is required



- Our biosphere is under threat from rising carbon emissions
- Our society sees persistent inequality and lack of access to basic services
- Our economy continues to drive unsustainable consumption
- > 30% of sampled indicators actually deteriorating, all could be undermined by climate change

Digital technologies are having a powerful impact

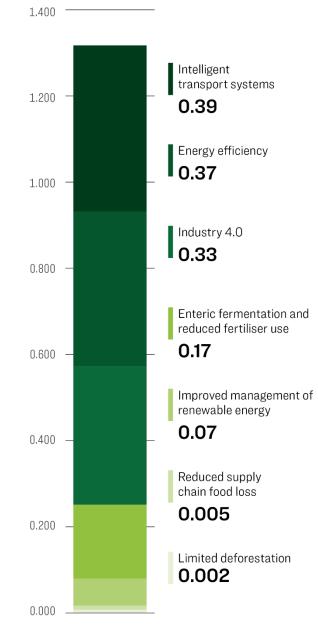


- Powerful impact on 103 targets through the four identified impact functions
- Deployment of existing technologies will, on average, accelerate progress by 22% and mitigate downwards trends by 23%
- Extensive economic, social and environmental contribution of the sector itself

Digital technologies can and need to contribute more



- Need is self evident
- Negative externalities need better understanding and mitigation
- Upside emissions scenario with significant collaboration shows the potential
- Major obstacles need unlocking e.g. impact measurement
- \$3 trillion likely to be spent on R&D within the ICT sector from now until 2030





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